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           512 S SCOLIOSIS OR SCOLIOTIC
L2
         301681 S CROSSLINK?
L3
            249 S SPINAL FUSION
L4
            10 S L1 AND L2
L5
              2 S L2 AND L3
              4 S L4 AND (PY<2002 OR AY<2002 OR PRY<2002)
L6
L7
              0 S L5 AND (PY<2002 OR AY<2002 OR PRY<2002)
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     AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS,
     CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,
     DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 09:58:27 ON 04 AUG 2008
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L10
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15 S L10 AND (PY<2002 OR AY<2002)

L11

=> file hcaplus
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 0.84 0.84

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FILE COVERS 1907 - 4 Aug 2008 VOL 149 ISS 6 FILE LAST UPDATED: 3 Aug 2008 (20080803/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s scoliosis or scoliotic

501 SCOLIOSIS 50 SCOLIOTIC

L1 512 SCOLIOSIS OR SCOLIOTIC

=> s crosslink?

L2 301681 CROSSLINK?

=> s spinal fusion

74137 SPINAL 289912 FUSION

L3 249 SPINAL FUSION (SPINAL(W)FUSION)

=> s 11 and 12

L4 10 L1 AND L2

=> s 12 and 13

L5 2 L2 AND L3

=> s 14 and (PY<2002 or AY<2002 or PRY<2002)

21964513 PY<2002 4211181 AY<2002

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USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Aug 1, 2008 (20080801/UP).
=> d 14 1-10 ti ans bib
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y
'ANS' IS NOT A VALID FORMAT FOR FILE 'HCAPLUS'
The following are valid formats:
ABS ----- GI and AB
ALL ----- BIB, AB, IND, RE
APPS ----- AI, PRAI
BIB ----- AN, plus Bibliographic Data and PI table (default)
CAN ----- List of CA abstract numbers without answer numbers
CBIB ----- AN, plus Compressed Bibliographic Data
CLASS ----- IPC, NCL, ECLA, FTERM
DALL ----- ALL, delimited (end of each field identified)
DMAX ----- MAX, delimited for post-processing
FAM ----- AN, PI and PRAI in table, plus Patent Family data
FBIB ----- AN, BIB, plus Patent FAM
IND ----- Indexing data
IPC ----- International Patent Classifications
MAX ----- ALL, plus Patent FAM, RE
PATS ----- PI, SO
SAM ----- CC, SX, TI, ST, IT
SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;
             SCAN must be entered on the same line as the DISPLAY,
             e.g., D SCAN or DISPLAY SCAN)
STD ----- BIB, CLASS
IABS ----- ABS, indented with text labels
IALL ----- ALL, indented with text labels
IBIB ----- BIB, indented with text labels
IMAX ----- MAX, indented with text labels
ISTD ----- STD, indented with text labels
OBIB ----- AN, plus Bibliographic Data (original)
OIBIB ----- OBIB, indented with text labels
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SBIB ----- BIB, no citations SIBIB ----- IBIB, no citations HIT ----- Fields containing hit terms HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT) containing hit terms HITRN ----- HIT RN and its text modification HITSTR ----- HIT RN, its text modification, its CA index name, and its structure diagram HITSEQ ----- HIT RN, its text modification, its CA index name, its structure diagram, plus NTE and SEQ fields FHITSTR ---- First HIT RN, its text modification, its CA index name, and its structure diagram FHITSEQ ---- First HIT RN, its text modification, its CA index name, its structure diagram, plus NTE and SEQ fields KWIC ----- Hit term plus 20 words on either side OCC ----- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number. ENTER DISPLAY FORMAT (BIB):ti abs bib

- L4 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Direct application of non-toxic crosslinking reagents to resist progressive spinal deformity
- AΒ This invention relates to method of improving the resistance of collagenous tissue to mech. degradation in accordance with the present invention comprises the step of contacting at least a portion of a collagenous tissue with an effective amount of a crosslinking reagent. Methods and devices for enhancing the body's own efforts to stabilize disks in scoliotic and other progressively deforming spines by increasing collagen crosslinks. This stability enhancement is caused by reducing the bending hysteresis and increasing the elasticity and bending stiffness of progressively deforming spines, by injecting non-toxic crosslinking reagents into the convex side of disks involved in the potential or progressing deformity curve. Alternatively, contact between the tissue and the crosslinking reagent is effected by placement of a time-release delivery system directly into or onto the target tissue. Methods and devices that use crosslinking agents for increasing the permeability of an intervertebral disk, improving fluid flux to the intervertebral disk, and increasing the biol. viability of cells within the intervertebral disk are provided.
- AN 2007:874403 HCAPLUS <<LOGINID::20080804>>
- DN 147:243356
- TI Direct application of non-toxic crosslinking reagents to resist progressive spinal deformity
- PA Hedman, Tom, USA
- SO PCT Int. Appl., 42pp. CODEN: PIXXD2
- DT Patent
- LA English

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FAN.CNT 1
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                                         APPLICATION NO. DATE
     WO 2007089233 A1 20070809 WO 2006-US3636 20060202
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PRAI WO 2006-US3636 20060202
              THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 2
               ALL CITATIONS AVAILABLE IN THE RE FORMAT
L4
     ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
ΤI
     Natural collagens crosslinked with non-toxic
     crosslinking agents to resist progressive spinal deformity
AB
     A method of improving the resistance of collagenous tissue to mech.
     degradation in accordance with the present invention comprises the step of
     contacting at least a portion of a collagenous tissue with an effective
     amount of a crosslinking reagent. Methods and devices for
     enhancing the body's own efforts to stabilize disks in scoliotic
     and other progressively deforming spines by increasing collagen
     crosslinks. This stability enhancement is caused by reducing the
     bending hysteresis and increasing the elasticity and bending stiffness of
     progressively deforming spines, by injecting non-toxic
     crosslinking reagents into the convex side of disks involved in
     the potential or progressing deformity curve. Alternatively, contact
     between the tissue and the crosslinking reagent is effected by
     placement of a time-release delivery system directly into or onto the
     target tissue. Methods and devices that use crosslinking agents
     for increasing the permeability of an intervertebral disk, improving fluid
     flux to the intervertebral disk, and increasing the biol. viability of
     cells within the intervertebral disk are provided.
ΑN
     2007:873614 HCAPLUS <<LOGINID::20080804>>
DN
     147:220111
ΤI
     Natural collagens crosslinked with non-toxic
     crosslinking agents to resist progressive spinal deformity
ΙN
     Hedman, Thomas P.
PΑ
     USA
     U.S. Pat. Appl. Publ., 17pp., Cont.-in-part of U.S. Ser. No. 786,861.
SO
     CODEN: USXXCO
DT
     Patent
     English
LA
FAN.CNT 6
                                             APPLICATION NO. DATE
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                                 DATE
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PI US 20070183973 A1 20070809

US 20030049301 A1 20030313

US 20040253219 A1 20041216

US 20070196351 A1 20070823

US 20070202143 A1 20070830

US 20080064021 A1 20080313

PRAI US 2001-316287P P 20010831

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US 2003-498790P P 20030828

US 2004-786861 A2 20040224

US 2006-346464 A2 20060202

US 2007-712684 A2 20070228

US 2007-726790 A2 20070322
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- L4 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Polymer compositions comprising a antifibrotic or an antiinfective agent
- AB Polymer compns. comprise a therapeutic agents such as antifibrotic or an antiinfective agent. Microspheres of mycophenolic acid-PVA were prepared and the average particle size distribution was determined
- AN 2005:493532 HCAPLUS <<LOGINID::20080804>>
- DN 143:32339
- TI Polymer compositions comprising a antifibrotic or an antiinfective agent
- IN Hunter, William L.; Gravett, David M.; Toleikis, Philip M.; Maiti, Arpita; Liggins, Richard T.; Takacs-Cox, Aniko; Avelar, Rui; Loss, Troy A. E.
- PA Angiotech International A.-G., Switz.
- SO PCT Int. Appl., 1945 pp. CODEN: PIXXD2
- DT Patent

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     WO 2005-US15036
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L4 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Method for the treatment of connective tissue diseases

AB Method is disclosed for the treatment of collagen diseases. The invention relates to a method for the treatment of connective tissue diseases associated with weakening or damage of collagen tissue due to disease, injury or mech. stress by the application of a proteoglycan and electromagnetic

radiation. The treatment phys. and visually repairs the weakened or damaged tissue in vivo or in vitro and may be used on any animal having and collagen tissue.

AN 2005:405328 HCAPLUS <<LOGINID::20080804>>

DN 142:423912

TI Method for the treatment of connective tissue diseases

IN Pineau, Mitchell; Birchem, Gerald; Bon, Edwin

PA Visionary Biomedical, Inc., USA

SO PCT Int. Appl., 13 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

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WO	2003	-US3	4775		W		2003	1103											
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- RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L4 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Mutations Near Amino End of $\alpha 1(I)$ Collagen Cause Combined Osteogenesis Imperfecta/Ehlers-Danlos Syndrome by Interference with N-propeptide Processing
- Patients with OI/EDS form a distinct subset of osteogenesis imperfecta AΒ (OI) patients. In addition to skeletal fragility, they have characteristics of Ehlers-Danlos syndrome (EDS). The authors identified 7 children with types III or IV OI, plus severe large and small joint laxity and early progressive scoliosis. In each child with OI/EDS, we identified a mutation in the first 90 residues of the helical region of α 1(I) collagen. These mutations prevent or delay removal of the procollagen N-propeptide by purified N-proteinase (ADAMTS-2) in vitro and in pericellular assays. The mutant pN-collagen which results is efficiently incorporated into matrix by cultured fibroblasts and osteoblasts and is prominently present in newly incorporated and immaturely cross-linked collagen. Dermal collagen fibrils have significantly reduced cross-sectional diams., corroborating incorporation of pN-collagen into fibrils in vivo. Differential scanning calorimetry revealed that these mutant collagens are less stable than the corresponding procollagens, which is not seen with other type I collagen helical mutations. These mutations disrupt a distinct folding region of high thermal stability in the first 90 residues at the amino end of type I collagen and alter the secondary structure of the adjacent N-proteinase cleavage site. Thus, these OI/EDS collagen mutations are directly responsible for the bone fragility of OI and indirectly responsible for EDS symptoms, by interference with N-propeptide removal.
- AN 2005:393826 HCAPLUS <<LOGINID::20080804>>
- DN 142:461529
- TI Mutations Near Amino End of $\alpha 1(I)$ Collagen Cause Combined

- Osteogenesis Imperfecta/Ehlers-Danlos Syndrome by Interference with N-propeptide Processing
- AU Cabral, Wayne A.; Makareeva, Elena; Colige, Alain; Letocha, Anne D.; Ty, Jennifer M.; Yeowell, Heather N.; Pals, Gerard; Leikin, Sergey; Marini, Joan C.
- CS Bone and Extracellular Matrix Branch, NICHD, National Institutes of Health, Bethesda, MD, 20892, USA
- SO Journal of Biological Chemistry (2005), 280(19), 19259-19269 CODEN: JBCHA3; ISSN: 0021-9258
- PB American Society for Biochemistry and Molecular Biology
- DT Journal
- LA English
- RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L4 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Corrosion of spinal implants retrieved from patients with scoliosis
- AΒ Spinal implants retrieved from 11 patients with scoliosis were examined All the implants were posterior instrumentation systems made of 316L stainless steel and composed of rods, hooks, and crosslink connectors. Corrosion was classified into grades 0 to 3 based on macroscopic findings of the rod surface at the junction of each hook or crosslink connector. Grade 0 was defined as no sign of corrosion, grade 1 as surface discoloration, grade 2 as superficial metal loss, and grade 3 as severe metal loss. The depths and characteristics of metal loss areas were examined Spinal implants showed more corrosion after long-term implantation than after short-term implantation. Corrosion was seen on many of the rod junctions (66.2%) after long-term implantation, but there was no difference between the junction at the hook and those at the crosslink connector. It is thought that intergranular corrosion and fretting contributed to the corrosion of implants. current study demonstrated that corrosion takes place at many of the rod junctions in long-term implantation. The authors recommend removal of the spinal implants after solid bony union.
- AN 2005:297335 HCAPLUS <<LOGINID::20080804>>
- DN 144:198449
- TI Corrosion of spinal implants retrieved from patients with scalings
- AU Akazawa, Tsutomu; Minami, Shohei; Takahashi, Kazuhisa; Kotani, Toshiaki; Hanawa, Takao; Moriya, Hideshige
- CS Department of Orthopedic Surgery, Graduate School of Medicine, Chiba University, 1-8-1 Inohana, Chuo-ku, Chiba, 260-8670, Japan
- SO Journal of Orthopaedic Science (2005), 10(2), 200-205 CODEN: JOSCFS; ISSN: 0949-2658
- PB Springer Tokyo
- DT Journal
- LA English
- RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L4 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Non-toxic crosslinking reagents to resist curve progression in scoliosis and increase disc permeability
- AB A method of improving the resistance of collagenous tissue to mech. degradation in accordance with the present invention comprises the step of contacting at least a portion of a collagenous tissue with an effective amount of a crosslinking reagent, i.e., genipin, ribose, threose, and lysyl oxidase. Methods and devices for enhancing the body's own efforts to stabilize disks in scoliotic spines by increasing collagen crosslinks. This stability enhancement is caused by

reducing the bending hysteresis and increasing the bending stiffness of scoliotic spines, by injecting non-toxic crosslinking reagents into the convex side of disks involved in the scoliotic curve. Alternatively, contact between the tissue and the crosslinking reagent is affected by placement of a time-release delivery system directly into or onto the target tissue. Methods and devices that use crosslinking agents for increasing the permeability of an intervertebral disk, improving fluid flux to the intervertebral disk, and increasing the biol. viability of cells within the intervertebral disk are provided.

- AN 2004:1080506 HCAPLUS <<LOGINID::20080804>>
- DN 142:62696
- TI Non-toxic crosslinking reagents to resist curve progression in scoliosis and increase disc permeability
- IN Hedman, Thomas P.
- PA University of Southern California, USA
- SO U.S. Pat. Appl. Publ., 15 pp., Cont.-in-part of U.S. Ser. No. 230,671. CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 6

FAN.	PA:	PATENT NO.					D			APPLICATION NO.						DATE			
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	EP	1660	TJ, BW, AZ, EE, SI, SN,	TM, GH, BY, ES, SK, TD,	TN, GM, KG, FI, TR, TG	TR, KE, KZ, FR, BF,	TT, LS, MD, GB, BJ,	PL, TZ, MW, RU, GR, CF, 2006	UA, MZ, TJ, HU, CG,	UG, NA, TM, IE, CI,	US, SD, AT, IT, CM,	UZ, SL, BE, LU, GA,	VC, SZ, BG, MC, GN,	VN, TZ, CH, NL, GQ,	YU, UG, CY, PL, GW,	ZA, ZM, CZ, PT, ML,	ZM, ZW, DE, RO, MR,	ZW AM, DK, SE, NE,	
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- L4 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI The kyphoscoliotic type of Ehlers-Danlos syndrome (type VI): differential effects on the hydroxylation of lysine in collagens I and II revealed by analysis of cross-linked telopeptides from urine

- The kyphoscoliotic type of Ehlers-Danlos syndrome (EDS type VIA) (OMIM AΒ 225400) is an autosomal recessive connective tissue disorder that results from mutations in the lysyl hydroxylase 1 gene (PLOD1) causing underhydroxylation of lysine residues in tissue collagens, particularly of skin. Previous studies have shown that the pool of collagen crosslinking amino acids, hydroxylysyl pyridinoline (HP) and lysyl pyridinoline (LP) excreted in urine has an abnormally low HP/LP ratio, which is diagnostic of the condition. Here the authors isolated cross-linked peptides containing these residues from the urine of a child with EDS VIA homozygous for a mutation that results in a stop codon and effective null expression of PLOD1 enzyme activity. Peptides that had originated from bone type I collagen and cartilage type II collagen were identified. A cross-linked N-telopeptide fraction that is derived from bone type I collagen contained only LP, no HP, which means that the helical lysines at residues 930 of $\alpha 1 (I)$ and 933 of $\alpha 2 (I)$ of the collagen triple-helix had not been hydroxylated. The equivalent peptide fraction from a normal child's urine gave a ratio of HP to LP of 1.5:1 typical for normal bone collagen. A second cross-linked peptide that is derived from the C-telopeptide domain of cartilage type II collagen showed both HP and LP in a 2:1 ratio, compared with 18:1 for the equivalent peptide from a normal child's urine. The results show that in EDS VIA, bone type I collagen is more markedly underhydroxylated than cartilage type II collagen, at least at those helical sites that form cross-links. The residual fraction of HP found in the urine of EDS VI patients therefore appears to be contributed in significant part by the degradation products of cartilage. Since PLOD1 is null, other PLOD genes must be responsible for the helical hydroxylation activity that results in HP. The presented approach of analyzing urinary cross-linked C-telopeptide fragments of type II collagen may allow the detection of chondrodysplasias due to genetic defects in lysyl hydroxylase isoforms active in cartilage.
- AN 2002:530958 HCAPLUS <<LOGINID::20080804>>
- DN 138:13136
- TI The kyphoscoliotic type of Ehlers-Danlos syndrome (type VI): differential effects on the hydroxylation of lysine in collagens I and II revealed by analysis of cross-linked telopeptides from urine
- AU Eyre, David; Shao, Ping; Ann Weis, Mary; Steinmann, Beat
- CS Orthopaedic Research Laboratories, University of Washington, Seattle, WA, 98195-6500, USA
- SO Molecular Genetics and Metabolism (2002), 76(3), 211-216 CODEN: MGMEFF; ISSN: 1096-7192
- PB Elsevier Science
- DT Journal
- LA English
- RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L4 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Collagen crosslinking and cartilage glycosaminoglycan composition in normal and scoliotic chickens
- AB The amts. of lysine-derived crosslinks in collagens from tendon, cartilage, intervertebral disk, and bone and changes in the composition of sternal cartilage glycosaminoglycans were estimated in two lines of chickens, a control-isogenic line and a line that develops scoliosis. In the scoliotic line, scoliosis first appears at 3-4 wk and progressively increases in severity and incidence so that 90% of the birds express the lesion by week 10. It was reported previously that cartilage, tendon, and bone collagens from scoliotic birds are more soluble than corresponding collagens from normal birds. Herein, collagen crosslinking and altered proteoglycan metabolism are examined as possible mechanisms for the differences in collagen solubility. At 1 wk of age, there were fewer reducible crosslinking amino acids

(hydroxylsinonorleucine, dihydroxylysinonorleucine, and lysinonorleucine) in collagens from sternal cartilage and tendon in the scoliotic line than in the isogenic line. However, by week 3 and at weeks 5 or 7values were similar in both groups. The amts. of hydroxypyridinium in vertebral bone and intervertebral disk collagen were also similar in both groups of birds. Consequently, differences in collagen crosslinking do not appear to be a persistent developmental defect underlying the expression of scoliosis in the model. However, differences were observed in cartilage proteoglycans and glycosaminoglycans from the scoliotic line that were not present in cartilage from the isogenic line. The average mol. weight of the uronide-containing glycosaminoglycans was 30% less in the scoliotic line than in the isogenic line, i.e., 12,000 compared to 18,000. The size distribution of cartilage proteoglycans from the scoliotic line also differed from that of proteoglycans from the isogenic line. An overly sulfated chondroitin also appeared to be a minor component of the glycosaminoglycans in cartilage from the scoliotic line. chondroitin was not observed in cartilage from the isogenic line of chickens.

AN 1989:21883 HCAPLUS <<LOGINID::20080804>>

DN 110:21883

OREF 110:3693a,3696a

- TI Collagen crosslinking and cartilage glycosaminoglycan composition in normal and scoliotic chickens
- AU Greve, Carl; Opsahl, William; Reiser, Karen; Abbott, Ursula; Kenney, Cristina; Benson, Daniel; Rucker, Robert
- CS Dep. Nutr., Univ. California, Davis, CA, 95616, USA
- SO Biochimica et Biophysica Acta, General Subjects (1988), 967(2), 275-83 CODEN: BBGSB3; ISSN: 0304-4165
- DT Journal
- LA English
- L4 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Scoliosis in chickens: responsiveness of severity and incidence to dietary copper
- AB The severity and incidence of spinal lesions were manipulated in a line of chickens susceptible to scoliosis by varying their dietary intake of Cu. A decrease in expression of the lesion was related to increased intake of Cu. The change in expression, however, appeared to be related only indirectly to the defects in collagen crosslinking, maturation, and deposition known to be associated with dietary Cu deficiency. Thus, a dietary constituent in the range of normal intakes may act as an environmental factor in the expression of scoliosis.
- AN 1984:489373 HCAPLUS <<LOGINID::20080804>>
- DN 101:89373
- OREF 101:13701a,13704a
- TI Scoliosis in chickens: responsiveness of severity and incidence to dietary copper
- AU Opsahl, William; Abbott, Ursula; Kenney, Cristina; Rucker, Robert
- CS Dep. Nutr., Univ. California, David, CA, 95616, USA
- SO Science (Washington, DC, United States) (1984), 225(4660), 440-2 CODEN: SCIEAS; ISSN: 0036-8075
- DT Journal
- LA English

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L5 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN
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TI Malleable medical implants such as pastes or putties, containing demineralized bone matrix, particulate collagen, and polysaccharide gel

AB Described are malleable medical compns. such as pastes or putties that include solids combined with a liquid carrier. The solids include particulate collagen and particulate demineralized bone matrix (DRM). The liquid carrier includes an aqueous medium comprising a polysaccharide. Also described are methods for making and using such medical compns. Thus, osteoinductive putty was formulated comprising 12.9 g sodium alginate, 325 cc phosphate buffered saline, 16.13 g milled, crosslinked collagen sponge, 100 g DRM having a particle size of 55-850 μm. The osteoinductive putties prepared as above contained, on a dry weight basis, 77.5 % DBM, 10.0 % alginate, and 12.5 % collagen; on a wet weight basis, the putties contained 21.4 % DBM, 2.8 % sodium alginate, 3.4 % collagen, and 72.4 % phosphate buffered saline. The compns. were of good putty quality and would retain their shape unless kneaded or pressed upon.

AN 2007:1242930 HCAPLUS <<LOGINID::20080804>>

DN 147:474859

TI Malleable medical implants such as pastes or putties, containing demineralized bone matrix, particulate collagen, and polysaccharide gel

IN Drapeau, Susan J.; Chamness, Kathy L.; McKay, William F.

PA USA

SO U.S. Pat. Appl. Publ., 13pp. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

1 1 111 4	PA:	ATENT NO.				KIND		DATE			APPLICATION NO.					DATE			
PI	WO	20070254042 2007130906 2007130906			A1 A2 A3		20071101 20071115 20080327			US 2006-415037 WO 2007-US67767					20060501 20070430				
	WO		AE, CH, GD, KN, MN, RS,	AG, CN, GE, KP, MW, RU,	CO, GH, KR, MX, SC,	AM, CR, GM, KZ, MY, SD,	CU, GT, LA, MZ, SE,	AU, CZ, HN, LC, NA, SG, VC,	AZ, DE, HR, LK, NG, SK,	DK, HU, LR, NI, SL,	DM, ID, LS, NO, SM,	DZ, IL, LT, NZ, SV,	EC, IN, LU, OM,	EE, IS, LY, PG,	EG, JP, MA, PH,	ES, KE, MD, PL,	FI, KG, MG, PT,	GB, KM, MK, RO,	
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L5 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Enhancement of graft bone healing by intermittent administration of human parathyroid hormone (1-34) in a rat spinal arthrodesis model

AB Bone grafting is commonly used to treat skeletal disorders associated with large bone defect or unstable joint. It can take several months, however, to achieve a solid union and bony fusion sometimes delays or fails especially

osteoporosis patients. Therefore, we used a rat spinal arthrodesis model to examine whether intermittent administration of human PTH(1-34) accelerates bone graft healing. Eighty-two male Sprague-Dawley rats underwent posterolateral spinal arthrodesis surgery using autologous bone grafts. Animals were given daily s.c. injections of hPTH(1-34) (40 $\mu g/kg/day$ PTH group) or 0.9% saline vehicle (control group) from

immediately after surgery till death. Five rats each were killed 2, 4, 7, and 14 days after the surgery, and mRNA expression anal. was performed on harvested grafted bone. Seven rats each were killed 14, 28, and 42 days after the surgery, and the lumbar spine, which contained the grafted spinal segment, was subjected to fusion assessment, microstructural anal. using three-dimensional micro-computed tomog., and histol. examination Serum bone metabolism markers were analyzed. The results indicated that PTH administration decreased the time required for graft bone healing and provided a structurally superior fusion mass in the rat spinal arthrodesis model. PTH administration increased the fusion rate on day 14 (14% in the control group and 57% in the PTH group), accelerated grafted bone resorption, and produced a larger and denser fusion mass compared to control. MRNA expression of both osteoblast- and osteoclast-related genes was upregulated by PTH treatment, and serum bone formation and resorption marker levels were higher in the PTH group than in the control group. Histol. calculated mineral apposition rate, mineralized surface and osteoclast surface were also higher in the PTH group than in the control group. These findings suggest that intermittent administration of PTH(1-34)enhanced bone turn over dominantly on bone formation at the graft site, leading to the acceleration of the spinal fusion. Based on the results of this study, intermittent injection of hPTH(1-34) might be an efficient adjuvant intervention in spinal arthrodesis surgery and all other skeletal reconstruction surgeries requiring bone grafts.

- AN 2007:1192720 HCAPLUS <<LOGINID::20080804>>
- DN 148:183682
- TI Enhancement of graft bone healing by intermittent administration of human parathyroid hormone (1-34) in a rat spinal arthrodesis model
- AU Abe, Yuichiro; Takahata, Masahiko; Ito, Manabu; Irie, Kazuharu; Abumi, Kuniyoshi; Minami, Akio
- CS Department of Orthopaedic Surgery, Hokkaido University Graduate School of Medicine, Kita-15 Nishi-7 Kita-ku, Sapporo, 060-8638, Japan
- SO Bone (San Diego, CA, United States) (2007), 41(5), 775-785 CODEN: BONEDL; ISSN: 8756-3282
- PB Elsevier
- DT Journal
- LA English
- RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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FILE 'HCAPLUS' ENTERED AT 09:17:52 ON 04 AUG 2008
L1 512 S SCOLIOSIS OR SCOLIOTIC
L2 301681 S CROSSLINK?
L3 249 S SPINAL FUSION
L4 10 S L1 AND L2
L5 2 S L2 AND L3
L6 4 S L4 AND (PY<2002 OR AY<2002 OR PRY<2002)
L7 0 S L5 AND (PY<2002 OR AY<2002 OR PRY<2002)

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FILE 'STNGUIDE' ENTERED AT 09:18:26 ON 04 AUG 2008

FILE 'HCAPLUS' ENTERED AT 09:18:31 ON 04 AUG 2008

FILE 'STNGUIDE' ENTERED AT 09:18:32 ON 04 AUG 2008

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CA SUBSCRIBER PRICE	0.00	-9.60
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- 1 FILE AGRICOLA
- 10 FILE BIOSIS
- 3 FILE BIOTECHNO

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            FILE CONFSCI
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            FILE DISSABS
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            FILE EMBASE
            FILE ESBIOBASE
            FILE IFIPAT
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            FILE LIFESCI
         14
            FILE MEDLINE
            FILE PASCAL
            FILE PHIN
            FILE PROMT
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=> s scolio? and crosslink?
           49 SCOLIO? AND CROSSLINK?
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            23 DUP REM L9 (26 DUPLICATES REMOVED)
=> s 110 and (PY<2002 or AY<2002)
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           15 L10 AND (PY<2002 OR AY<2002)
L11
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=> d 111 1-11 ti abs bib

- L11 ANSWER 1 OF 15 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
- TI Fanconi Anemia with triphalangeal thumbs, syndactyly and contractures of the fingers in a 2 year old boy.
- Fanconi Anemia (FA) is a rare autosomal recessive disorder associated with AB pancytopenia, spontaneous chromosome instability and a variety of congenital anomalies. Hypersensitivity to bifunctional alkylating or DNA crosslinking agents like Mitomycin C (MMC), Diepoxybutane (DEB) and Nitrogen Mustard (HN2) is used as a differential diagnostic test. A variable phenotype and age of onset of anemia make diagnosis difficult in some cases. We report a case of Fanconi anemia detected by the MMC stress test in a 2 year old boy, operated for bilateral syndactyly and contractures of fingers. He had a bifid thumb on the left hand and bilateral triphalangeal thumbs. There was no history of consanguinity or malformations, though a maternal uncle had a bifid thumb. USG in a subsequent pregnancy showed bony anomalies like scoliosis, talipes, contractures and radial aplasia, consistent with FA. The parents opted for termination. An early diagnosis of FA in a non-manifesting child would provide more time to explore different treatment options, since a delay in diagnosis could have serious consequences.
- AN 2003:53559 BIOSIS <<LOGINID::20080804>>
- DN PREV200300053559
- TI Fanconi Anemia with triphalangeal thumbs, syndactyly and contractures of the fingers in a 2 year old boy.
- AU Madon, Prochi F. [Reprint Author]; Athalye, Arundhati S.; Lulla, Chander P.; Parikh, Firuza R.
- CS Jaslok Hospital and Research Centre, 15 Dr. G. Deshmukh Marg, Mumbai, 400 026, India prochimadon@hotmail.com
- SO International Journal of Human Genetics, (June 2001) Vol. 1, No. 2, pp. 87-90. print. ISSN: 0972-3757 (ISSN print).
- DT Article
- LA English
- ED Entered STN: 22 Jan 2003 Last Updated on STN: 22 Jan 2003
- L11 ANSWER 2 OF 15 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
- TI Comparison of single- and dual-rod techniques for posterior spinal instrumentation in the treatment of adolescent idiopathic scoliosis.
- AB Study Design. Two groups of patients undergoing posterior spinal instrumentation and arthrodesis for treatment of adolescent idiopathic scoliosis were reviewed retrospectively. Objective. To compare intraoperative concerns (operative time and blood loss), complications, and outcome in patients undergoing single or double posterior rod instrumentation for treatment of adolescent idiopathic scoliosis Summary of Background Data. The current treatment of idiopathic scoliosis includes posterior spinal instrumentation and arthrodesis. The standard configuration is a rectangular construct of dual rods connected by crosslinks. Use of a single rod with multiple fixation points has been proposed as an alternative method to decrease operative time and blood loss, and to avoid late deep infections. Methods. In this study, 21 patients underwent posterior instrumentation using a standard dual-rod construct, and 25 patients underwent posterior instrumentation using a solitary rod with multiple fixation points. Patients were assessed after a minimum 2-year follow-up period. Results. No significant differences were found in blood loss, operative time, or overall frequency of long-term complications. Although not statistically significant, the trend was toward implant prominence in the double-rod group and implant failure in the single-rod group. Implant failure

occurred only in instrumentations extending into the lumbar spine. There was no statistical difference in curve progression. Conclusions. Single-rod instrumentation and dual-rod constructs offered similar curve correction, blood loss, and operative time. However, single-rod instrumentation may be more prone to implant failure when extended into the lumbar spine.

- AN 2000:411874 BIOSIS <<LOGINID::20080804>>
- DN PREV200000411874
- TI Comparison of single- and dual-rod techniques for posterior spinal instrumentation in the treatment of adolescent idiopathic scoliosis.
- AU Albers, Henry W. [Reprint author]; Hresko, M. Timothy; Carlson, Jeffery; Hall, John E.
- CS Orthopaedic Center for Spinal and Pediatric Care, Childrens' Medical Center, One Childrens' Plaza, Dayton, OH, 45404, USA
- SO Spine, (August 1, 2000) Vol. 25, No. 15, pp. 1944-1949. print. CODEN: SPINDD. ISSN: 0362-2436.
- DT Article
- LA English
- ED Entered STN: 27 Sep 2000 Last Updated on STN: 8 Jan 2002
- L11 ANSWER 3 OF 15 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
- TI Bending of the Cotrel-Dubousset instrumentation after direct trauma: A case report.
- Study Design. Case report. Objectives. To describe a fracture through AB the fusion mass of a spine that had been corrected previously with Cotrel-Dubousset rods. These rods had failed in bending after direct trauma. Summary of Background Data. Nine years after successful treatment of scoliosis with Cotrel-Dubousset instrumentation, the patient was in a motor vehicle accident and sustained a hyperextension spine injury with complete L1-L2 paraplegia and disruption of the fusion mass. The Cotrel-Dubousset instrumentation rods, which failed in bending, could not be corrected in situ, and the angulated segments had to be resected. The spine then became extremely unstable, and the patient consulted the authors for definitive stabilization. Results. The spine was stabilized by attaching the proximal and distal retained Cotrel Dubousset instrumentation to supplemental rods in a "domino" fashion. Crosslinks were added to improve the torsional stability. Intraoperatively, the fracture was well reduced, and the fixation was stable. A posterolateral fusion was performed with allogenic bone graft. Conclusion. Bent Cotrel-Dubousset instrumentation rods are still very strong and may not correct in situ. If resection is required, the retained portions of Cotrel-Dubousset instrumentation can serve as attachments to restore stable fixation a "domino" technique.
- AN 2000:259743 BIOSIS <<LOGINID::20080804>>
- DN PREV200000259743
- TI Bending of the Cotrel-Dubousset instrumentation after direct trauma: A case report.
- AU Nana, Arvind; Gugala, Zbigniew; Lindsey, Ronald W. [Reprint author]; Caram, Pedro M.; Dickson, Jesse H.
- CS Department of Orthopedic Surgery, Baylor College of Medicine, 6560 Fannin, Suite 1900, Houston, TX, 77030, USA
- SO Spine, (April 1, 2000) Vol. 25, No. 7, pp. 891-894. print. CODEN: SPINDD. ISSN: 0362-2436.
- DT Article
- LA English
- ED Entered STN: 21 Jun 2000 Last Updated on STN: 5 Jan 2002
- L11 ANSWER 4 OF 15 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

- TI TSRH (Texas Scottish Rite Hospital) spinal instrumentation system.
- AN 2000:243012 BIOSIS <<LOGINID::20080804>>
- DN PREV200000243012
- TI TSRH (Texas Scottish Rite Hospital) spinal instrumentation system.
- AU Johnston, Charles E., II [Reprint author]; Ashman, Richard B.
- CS Texas Scottish Rite Hospital for Children, Dallas, TX, 75219, USA
- SO Spine, (March 15, 2000) Vol. 25, No. 6 Suppl, pp. 37S-67S. print.

CODEN: SPINDD. ISSN: 0362-2436.

- DT Article
 - General Review; (Literature Review)
- LA English
- ED Entered STN: 14 Jun 2000 Last Updated on STN: 5 Jan 2002
- L11 ANSWER 5 OF 15 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
- TI Posterior spinal instrumentation and fusion of a neuromuscular scoliosis in a patient with autosomal dominant osteopetrosis.
- AΒ Study Design: A case report of a patient with autosomal dominant osteopetrosis and neuromuscular scoliosis who required surgical instrumentation and fusion of her spine. Objective: To illustrate the surgical technique and long-term outcome in this rare form of spinal deformity. Summary of Background Data: Osteopetrosis is a group of rare skeletal dysplasias characterized clinically by skeletal osteosclerosis that is classically described in appearance as "marble bone." Despite the ubiquitous involvement of the vertebra, clinical manifestations of spinal involvement are uncommon. We present the case of an osteopetrosis patient with neuromuscular scoliosis who required surgical correction of her progressive deformity. There are no prior reports in the literature concerning operative or nonoperative management of scoliosis in this patient population. Methods: The surgical technique utilized as well as the patient's response to surgical management of her scoliosis is presented with 5 year follow-up. Results: The patient underwent a successful T4 to L1 posterior spine fusion and instrumentation using Luque rods, sublaminar wires and allograft bone augmentation. At 5 years following her index procedure, she is clinically and radiographically fused. Conclusion: Patients with osteopetrosis present unique surgical challenges during surgical correction of spinal deformities. segmental sublaminar wires with 1/4-inch rods and crosslinks afforded stable fixation despite poor bone quality. Allograft bone combined with postoperative bracing resulted in a well-maintained correction and a solid fusion. Five year follow-up and continued radiographic evidence of stable fusion indicate that the presented approach can lead to a successful outcome in the osteopetrotic patient population.
- AN 2000:131589 BIOSIS <<LOGINID::20080804>>
- DN PREV20000131589
- TI Posterior spinal instrumentation and fusion of a neuromuscular scoliosis in a patient with autosomal dominant osteopetrosis.
- AU Westerlund, L. Erik; Blanco, John S. [Reprint author]; Chhabra, Abhinav
- CS Department of Orthopaedic Surgery, Division of Pediatric Orthopaedics, University of Virginia Health System, 2270 Ivy Road, Charlottesville, VA, 22903, USA
- SO Spine, (Jan. 15, 2000) Vol. 25, No. 2, pp. 265-267. print. CODEN: SPINDD. ISSN: 0362-2436.
- DT Article
- LA English
- ED Entered STN: 12 Apr 2000 Last Updated on STN: 4 Jan 2002
- L11 ANSWER 6 OF 15 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

TI Spinal-pelvic fixation in patients with lumbosacral neoplasms.

Object: Primary and metastatic neoplasms of the lumbosacral junction frequently pose a complex problem for the surgical management and stabilization of the spine because of the anatomical and biomechanical factors of this transition zone between spine and pelvis. The authors have used a modification of the Galveston technique, originally described by Allen and Ferguson in the treatment of scoliosis, to achieve rigid spinal-pelvic fixation in patients with lumbosacral neoplasms. authors retrospectively reviewed their experience, with particular attention to method, pain relief, and neurological status. Methods: From July 1994 through December 1998, 13 patients at the authors' institution have required spinal-pelvic fixation secondary to instability caused by primary (eight cases) or metastatic (five cases) neoplasms. Previous treatment included spinal surgery in 10 (77%), radiation therapy in seven (54%), and/or chemotherapy in six (46%). Following tumor resection, fixation was achieved by intraoperative placement of contoured titanium rods bilaterally into the ilium. These rods were attached to the lumbar spine with pedicle screws and subsequently crosslinked. Arthrodesis was performed. In the follow-up period of 3 to 50 months (average 20 months), nine (69%) of 13 patients were still alive. There were no cases of surgery-related death. Seven weeks postoperatively instrumentation failure occurred in one patient and was corrected by performing double L-rod spinal-pelvic fixation. Two patients experienced neurological dysfunction (ankle weakness and neurogenic bladder) that was thought to be related to tumor resection rather than the fixation procedure. Neurological status improved in four patients and remained unchanged in seven patients. Ambulatory status improved in 62% (eight patients), remained unchanged in 23% (three patients), and worsened in 15% (two patients). Spinal pain, as measured by a visual analog pain scale and determined by medication consumption was significantly reduced in 85% (11 cases). Conclusions: In selected patients with primary or metastatic lumbosacral tumors, resection followed by modified Galveston L-rod spinal-pelvic fixation is an effective means of achieving stabilization that can provide significant pain relief and preserve ambulatory capacity.

AN 2000:84851 BIOSIS <<LOGINID::20080804>>

DN PREV200000084851

- TI Spinal-pelvic fixation in patients with lumbosacral neoplasms.
- AU Jackson, Robert J. [Reprint author]; Gokaslan, Ziya L.
- CS Department of Neurosurgery, Baylor College of Medicine, Houston, TX, USA
- SO Journal of Neurosurgery, (Jan., 2000) Vol. 92, No. 1 suppl., pp. 61-70. print.

CODEN: JONSAC. ISSN: 0022-3085.

- DT Article
- LA English
- ED Entered STN: 1 Mar 2000 Last Updated on STN: 3 Jan 2002
- L11 ANSWER 7 OF 15 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN TI Spinal fusion in Duchenne's muscular dystrophy.
- AB The Women's and Children's Hospital experience with Luque spinal fusion in Duchenne's muscular dystrophy was reviewed from its commencement in 1983 to the present with a view to assessing the clinical and radiologic outcome and safety of the procedure. Seventeen boys have undergone spinal fusion. L-rod instrumentation was used in 10, six of whom had significant problems with sitting imbalance or progression of the scoliosis or both. In seven cases, distal instrumentation was taken to the pelvis with a Galveston construct and rigid crosslinking. Apart from some progression and sitting imbalance in the L-rod group, there were few complications. In the Galveston group, pelvic obliquity was corrected by a mean of 63%, and there was better maintenance of correction. There were no pseudoarthroses or instrument failures in the Galveston group. Of the

total group, four patients had forced vital capacity (FVC) values lt 25% predicted, and two required ventilation postoperatively (lt 48 h). There were no other respiratory complications. The effect of surgery on respiratory function remains uncertain. Spinal fusion with the Luque rod construct and pelvic fixation is a safe procedure. It provided a mean correction of 60% and control of pelvic obliquity without significant postoperative deterioration. In our experience, surgery can be safely performed with FVC values down to 20% predicted. On the basis of these data, our current practice is to instrument to the pelvis with a Galveston construct and Texas Scottish Rite Hospital cross-linking.

- AN 1996:263313 BIOSIS <<LOGINID::20080804>>
- DN PREV199698819442
- TI Spinal fusion in Duchenne's muscular dystrophy.
- AU Brook, P. D.; Kennedy, J. D.; Stern, L. M.; Sutherland, A. D.; Foster, B. K. [Reprint author]
- CS Dep. Orthop. Surg., Women's Child. Hosp., 72 King William Rd., N. Adelaide, SA 5006, Australia
- SO Journal of Pediatric Orthopaedics, (1996) Vol. 16, No. 3, pp. 324-331.
 ISSN: 0271-6798.
- DT Article
- LA English
- ED Entered STN: 10 Jun 1996 Last Updated on STN: 10 Jun 1996
- L11 ANSWER 8 OF 15 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN COLLAGEN CROSSLINKING AND CARTILAGE GLYCOSAMINOGLYCAN COMPOSITION IN NORMAL AND SCOLIOTIC CHICKENS.
- AΒ The amounts of lysine-derived crosslinks in collagens from tendon, cartilage, intervertebral disc, and bone and changes in the composition of sternal cartilage glycosaminoglycans were estimated in two lines of chickens, a control-isogenic line and a line that develops scoliosis. In the scoliotic line, scoliosis first appears at 3-4 weeks and progressively increases in severity and incidence so that 90% of the birds express the lesion by week 10. We have reported previously that cartilage, tendon, and bone collagen from scoliotic birds are more soluble than corresponding collagens from normal birds. Herein, collagen crosslinking and altered proteoglycan metabolism are examined as possible mechanisms for the differences in collagen solubility. At 1 week of age there were fewer reducible crosslinking amino acids (hydroxylysinonorleucine, dihydroxylysinonorleucine, and lysinonorleucine) in collagens from sternal cartilage and tendon in the scoliotic line than in the isogenic line. However, by week 3 and at weeks 5 or 7 values were similar in both groups. The amounts of hydroxypyridinium in vertebral bone and intervertebral disc collagen were also similar in both groups of birds. Consequently, differences in collagen crosslinking do not appear to be a persistent developmental defect underlying the expression of scoliosis in the model. However, differences were observed in cartilage proteoglycans and glycosaminoglycans from the scoliotic line that were not present in cartilage from the isogenic line. The average molecular weight of the uronide-containing glycosaminoglycans was 30% less in the scoliotic line than in the isogenic line, i.e., 12,000 compared to 18,000. The size distribution of cartilage proteoglycans from the scoliotic line also differed from that of proteoglycans from the isogenic line. An overly sulfated chondroitin also appeared to be a minor component of the glycosaminoglycans in cartilage from the scoliotic line. This chondroitin was not observed in cartilage from the isogenic line of chickens.
- AN 1989:90580 BIOSIS <<LOGINID::20080804>>
- DN PREV198987044716; BA87:44716

- TI COLLAGEN CROSSLINKING AND CARTILAGE GLYCOSAMINOGLYCAN COMPOSITION IN NORMAL AND SCOLIOTIC CHICKENS.
- AU GREVE C [Reprint author]; OPSAHL W; REISER K; ABBOTT U; KENNEY C; BENSON D; RUCKER R
- CS DEP NUTR, COLL AGRIC ENVIRON SCI, UNIV CALIF AT DAVIS, DAVIS, CA 95616, USA
- SO Biochimica et Biophysica Acta, (1988) Vol. 967, No. 2, pp. 275-283.

 CODEN: BBACAQ. ISSN: 0006-3002.
- DT Article
- FS BA
- LA ENGLISH
- ED Entered STN: 6 Feb 1989
 Last Updated on STN: 6 Feb 1989
- L11 ANSWER 9 OF 15 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
- TI COLLAGEN CROSSLINKING AND GLYCOSAMINOGLYCAN METABOLISM IN CHICKENS WITH AN INHERITED FORM OF SCOLIOSIS.
- AN 1987:327302 BIOSIS <<LOGINID::20080804>>
- DN PREV198733037899; BR33:37899
- TI COLLAGEN CROSSLINKING AND GLYCOSAMINOGLYCAN METABOLISM IN CHICKENS WITH AN INHERITED FORM OF SCOLIOSIS.
- AU GREVE C [Reprint author]; RUCKER R; REISER K; OPSAHL W; ABBOTT U
- CS DEP NUTRITION AND AVIAN SCI, UNIV CALIF, DAVIS, CALIF 95616, USA
- SO Federation Proceedings, (1987) Vol. 46, No. 4, pp. 1326.
 Meeting Info.: 71ST ANNUAL MEETING OF THE FEDERATION OF AMERICAN SOCIETIES
 FOR EXPERIMENTAL BIOLOGY, WASHINGTON, D.C., USA, MARCH 29-APRIL 2, 1987.
 FED PROC.
 - CODEN: FEPRA7. ISSN: 0014-9446.
- DT Conference; (Meeting)
- FS BF
- LA ENGLISH
- ED Entered STN: 25 Jul 1987 Last Updated on STN: 25 Jul 1987
- L11 ANSWER 10 OF 15 MEDLINE on STN
- TI Complications and results of long adult deformity fusions down to 14, 15, and the sacrum.
- AΒ STUDY DESIGN: This is a consecutive study of patients having undergone surgical treatment of adult lumbar scoliosis. Follow-up ranged from 2 to 13 years (average 5 years). OBJECTIVES: To assess the complications and outcomes of patients with long fusions to L4 (n=23), L5 (n=21), or the sacrum (n=15) and determine if a "deeply seated" L5 segment is protective. SUMMARY OF BACKGROUND DATA: Few studies assess outcomes and complications in adults fused from the thoracic spine to L4, L5, or the sacrum with minimum 2-year follow-up. METHODS: Fifty-eight patients (59 cases; average age 43 years; range 21 to 60) with minimum 2-year follow-up were analyzed for subsequent spinal degeneration and complications. Outcomes were assessed from questionnaires administered at latest follow-up. RESULTS: Sixteen percent of cases (7 of 44) fused short of the sacrum displayed subsequent postoperative distal spinal degeneration, although only three patients were symptomatic. Compared with the group with no subsequent degeneration, this group had a lower improvement in function and pain relief. Other complications for patients fused short of the sacrum included two cases with crosslink breakage, one with neurologic deficit, three with pseudarthroses, one with hook pullout, and one with L5 screw pullout. For cases fused to the sacrum, two cases with deep wound infections and one with loose iliac screw requiring removal were observed. Because two of four cases fused to L5 with subsequent degeneration at L5-S1 were observed to have "deeply seated" L5 segments and two of the four did not, the authors could

conclude only that "deep seating" of L5 is not absolute protection. CONCLUSIONS: Fusions short of the sacrum did not have predictable long-term results. Those fused short of the sacrum who developed distal spinal degeneration had worse outcomes. Patients fused to the sacrum did not have a higher complication rate. A "deeply seated" L5 segment does not necessarily protect the L5-S1 disc.

- AN 2001423552 MEDLINE <<LOGINID::20080804>>
- DN PubMed ID: 11337635
- ${
 m TI}$ Complications and results of long adult deformity fusions down to 14, 15, and the sacrum.
- AU Eck K R; Bridwell K H; Ungacta F F; Riew K D; Lapp M A; Lenke L G; Baldus C; Blanke K
- CS Department of Orthopaedic Surgery, Barnes-Jewish Hospital at Washington University, St. Louis, Missouri 63110, USA.
- SO Spine, (2001 May 1) Vol. 26, No. 9, pp. E182-92. Journal code: 7610646. ISSN: 0362-2436.
- CY United States
- DT Journal; Article; (JOURNAL ARTICLE)
- LA English
- FS Priority Journals
- EM 200107
- ED Entered STN: 30 Jul 2001 Last Updated on STN: 30 Jul 2001 Entered Medline: 26 Jul 2001
- L11 ANSWER 11 OF 15 MEDLINE on STN
- TI CDH: preliminary report on a new anterior spinal instrumentation.
- AΒ CDH (Cotrel-Dubousset-Hopf) instrumentation was developed with the aim of improving stability in ventral operation procedure and facilitating treatment of all anterior spinal diseases. The implantation of anterior plates and drawers, the use of a double-rod fixation within the implant in nonparallel directions, which provide an automatic locking mechanism against displacement, the prevention of dislocation of the cancellous bone srews, and the crosslink principle are its main characteristics. The device can be applied to the spine in accordance with its three-dimensional anatomy by any kind of force (distraction, compression, and rotation). Additional posterior instrumentation and postoperative external support are unnecessary in most cases because of improved stability. No reoperation was necessary following the mono- and multisegmental application of this method in 60 patients (28 with scoliosis, 12 with spondylodiscitis, 8 with primary tumors or isolated metastasis, 6 with fractures, 3 with failed back syndrome, 1 with kyphotic deformity, 1 with spondylolisthesis on two levels, and 1 with loss of correction after the dislocation of another posterior spinal instrumentation). Average blood loss was 950 ml; the average operating time was 3 h. In all, 16 monosegmental and 44 multisegmental procedures were carried out. In 25 patients, in particular those with paralytic scoliosis, a double-stage anterior and posterior spondylodesis was done.
- AN 96022801 MEDLINE <<LOGINID::20080804>>
- DN PubMed ID: 7552656
- TI CDH: preliminary report on a new anterior spinal instrumentation.
- AU Hopf A; Eysel P; Dubousset J
- CS Orthopadische Universitatsklinik, Mainz, Germany.
- SO European spine journal: official publication of the European Spine Society, the European Spinal Deformity Society, and the European Section of the Cervical Spine Research Society, (1995) Vol. 4, No. 3, pp. 194-9.
 - Journal code: 9301980. ISSN: 0940-6719.
- CY GERMANY: Germany, Federal Republic of
- DT Journal; Article; (JOURNAL ARTICLE)

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